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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/780,615

**Applicant(s)**

CHUNG ET AL.

**Examiner**

Wesley Stiles

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☒ Claim(s) 4,6 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/12/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 4, 6, and 7 are objected to because of the following informalities: In claim 4, "OSDgraphic" on the second to last line of page 12 should apparently be "OSD graphic". Claim 6 and 7 are objected to on the same basis, as each dependent claim carries all limitations of its parent claim. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-4, 6-7, 14-15, 17-18, 33-34, 38-41, and 43-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Schein et al. (US 6,002,394), hereafter Schein.
3. Regarding claim 1, Schein discloses an apparatus comprising an OSD graphic data receiver (part of the "television system" as described in column 8, lines 13-21) which receives OSD graphic data from an external source. The external source in the case of Schein is a satellite feed or telecommunications network line (column 5, lines 52-62). Schein also discloses a processor which processes the OSD graphic data (processor 100 of Figure 3; column 9, lines 3-5).
4. Regarding claim 2, Schein discloses the apparatus of claim 1 as discussed above, wherein the data receiver selects the OSD data from among a plurality of different types of OSD data located at the external source for display. The receiver of Schein allows the user to select which display to view from a choice of sports information, news, and others (column 14, lines 39-46).
5. Regarding claim 3, Schein discloses the apparatus of claim 1 as discussed above, wherein the receiver further comprises a memory which stores the incoming OSD data (column 9, lines 8-9) and a

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controller (OSD controller; column 8, lines 58-60) which stores the data in memory in response to a storage signal (graphic commands; column 8, lines 8-9) and reads the data in response to a display signal (displayed based on state of user input interface; column 9, lines 11-14).

6. Regarding claim 4, Schein teaches the apparatus of claim 3, wherein the OSD receiver comprises a broadcast television receiver (column 6, lines 37-39) which receives the broadcasting signal including OSD data (column 7, lines 2-5) and outputs a composite video signal including the OSD data (column 9, lines 15-19), a data detector (it is inherent that when the data is transmitted through the VBI of a signal, for example, that a data detector must be present to retrieve that information; column 7, lines 2-5), and a processor which processes the signal to output a composite display signal. Figure 16A shows both an OSD display and a program area display (526). In order for this to occur, the data and incoming signal must be processed by a processor (100 of Figure 3).

7. Regarding claim 6, Schein teaches the apparatus of claim 4, wherein the data detector detects data present in the VBI of the broadcasting signal (column 7, lines 2-5).

8. Regarding claim 7, Schein discloses the apparatus of claim 6, wherein the OSD data is provided in the form of a closed captioning mode (see examples of VBI data; column 6, lines 55-56).

9. Regarding claim 14, Schein discloses the apparatus of claim 1, wherein the OSD receiver comprises a tuner (column 6, lines 36-44), a modem connected to a communications network (on-line providers) which downloads the OSD data from an external source (column 13, lines 60-65), a video processor (processor 100 of Figure 3) which outputs a display video signal including the OSD data (Figure 16A).

10. Regarding claim 15, Schein teaches the apparatus of claim 14, wherein the OSD receiver comprises a memory which stores the OSD data downloaded by the modem (receiver has internal memory, so it is inherent that when the data is downloaded it is stored in that memory at least temporarily before the data is processed and displayed; column 9, lines 6-9), and a controller which stores the data in response to a data storage signal (such as pressing of "Services button"; column 14, lines 39-46) and reading the data from memory in response to a display signal (displayed based on state of user input interface; column 9, lines 11-14).

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11. Regarding claim 17, Schein discloses the apparatus of claim 14, wherein the external OSD data source is an OSD graphic data providing server (connects to server databases through on-line providers; column 13, lines 60-64).

12. Regarding claim 18, Schein discloses the apparatus of claim 15, wherein the external OSD source is a graphic data providing server (provider database; column 13, lines 60-64), and the controller downloads the via the modem from a home page of the OSD server (page which allows user to download more information, change subscriptions, and offer feedback; column 14, lines 54-61).

13. Regarding claim 33, Schein teaches a television set receiver ("television system"; column 8, lines 13-21) comprising a receiver (Figure 2; column 6, lines 37-39) to output a composite signal, a video processor for processing the video signal and overlapping the video signal with an OSD for display (Figure 16A shows video signal and OSD on same display screen; column 9, lines 15-19), a data decoder (VBI slicer; column 7, lines 2-5), a memory storing the OSD data (RAM in OSD Controller and Formatter [OSDCF] 124 of Figure 3; column 9, lines 8-9), and a controller (OSDCF 124 of Figure 3; column 8, lines 58-60) which stores the data in memory in response to a storage signal (graphic commands; column 8, lines 8-9) and reads the data in response to a display signal (displayed based on state of user input interface; column 9, lines 11-14).

14. Regarding claim 34, Schein teaches a web television receiver comprising a receiver receiving a television signal to output a composite video signal (PCTV; column 6, lines 46-65), a video processor for processing the video signal and overlapping the video signal with an OSD for display (Figure 16A shows video signal and OSD on same display screen; column 9, lines 15-19), a modem (modem 72 of Figure 2) connected to a communications network (on-line providers) which downloads the OSD data from an external source (column 13, lines 60-65), a memory storing data downloaded via the modem (receiver has internal memory, so it is inherent that when the data is downloaded it is stored in that memory at least temporarily before the data is processed and displayed; column 9, lines 6-9), a controller storing the OSD data in response to an downloading signal (user input, e.g. "Services Button"; column 14, lines 39-46) and reading the data from memory in response to a display signal (displayed based on state of user input interface; column 9, lines 11-14). Note: Schein discloses that the invention may be

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implemented on a PC, PCTV, television, or television connected to a set-top box. The "television system" refers to the requisite hardware and encompasses all of these physical embodiments.

15. Regarding claim 38, Schein teaches a method of displaying OSD data comprising receiving the data in a device from an external data source (signals arrive via modem access; column 14, lines 44-46) and displaying the data in a first mode (column 9, lines 15-19).

16. Regarding claim 39, Schein teaches the method of claim 38, wherein the step of receiving comprises storing the OSD data received from the external data source in a buffer region (incoming data is cached in OSDCF; column 9, lines 6-7) in response to an OSD input signal from the user (e.g. pressing "Services button"; column 14, lines 39-46), and storing the OSD data from the buffer in an OSD region in response to a replacement signal from the user (input causes data to be processed and stored in RAM; column 9, lines 8-9).

17. Regarding claim 40, Schein discloses the method of claim 39, wherein the data source may be a broadcasting station and the step of receiving comprises receiving the data in the broadcast signal (column 6, lines 51-56).

18. Regarding claim 41, Schein discloses the method of claim 39, wherein the data source may be a data providing server and the receiving comprises receiving the data from the server through the network (column 13, lines 58-65).

19. Regarding claim 43, Schein discloses the method of claim 40, wherein the displaying comprises overlapping the OSD data with a television signal and displaying the overlapped signal. This is evident in Figure 16A, showing the display featuring both the OSD graphic and the programming signal.

20. Regarding claim 44, Schein discloses the method of claim 41, wherein the displaying comprises overlapping the OSD data with a television signal and displaying the overlapped signal. This is evident in Figure 16A, showing the display featuring both the OSD graphic and the programming signal.

#### ***Claim Rejections - 35 USC § 103***

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Kohn (US 6,570,990).

23. Regarding claim 5, Schein teaches the apparatus of claim 3 but fails to disclose wherein the OSD receiver comprises a cathode ray tube (CRT) controller which detects a sync signal from the composite video signal and displays the video signal.

24. In analogous art, Kohn discloses broadcast receiving hardware which comprises a CRT controller (column 5, lines 63-65). Although Kohn does not explicitly express detecting a sync signal and displaying the signal, it is well-known in the art that drivers that contain a CRT controller which drives a display device must inherently have some type of sync detection function.

25. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the OSD data receiving system of Schein to display the composite video signal on a CRT display. Many consumer display screens (television and computer) are of a CRT format, so it would have been obvious to use this receiver apparatus to drive a CRT format in order to be compatible with the largest number of client devices, thus maximizing potential clients.

26. Regarding claim 16, the combination of Schein and Kohn teach all limitations of the claim, wherein the receiver comprises a CRT controller as discussed for claim 5 above.

27. Claims 8-9 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Lee (US 5,418,903).

28. Regarding claim 8, Schein discloses the apparatus of claim 3 but fails to explicitly detail a buffer region and an OSD region wherein the controller stores the data initially in the buffer region, then transfers it to the OSD region, then processes it for display.

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29. In analogous art, Lee teaches an OSD system with multiple memories. The apparatus comprises a volatile buffer memory and a non-volatile RAM memory (column 3, lines 21-24). The buffer contents are temporary and held only while the OSD (in this case a memo) is being edited, while the RAM stores the memo until a given time whether or not the system is on. The OSD data is stored in the buffer then transmitted to the OSD region (RAM) in response to a replacement signal (column 4, lines 50-54) and supplied to the processor for display in response to a display signal (after transfer the computer "calls the program for indicating storage completion of the memos. This causes display..."; column 4, lines 54-58).

30. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use a two memory system as shown by Lee to store and display data in the apparatus as taught by Schein. The motivation for doing so would have been to allow the incoming OSD data to be temporarily stored upon transmission until the user could decide whether to permanently keep it or discard it. This would allow the user to select what data they would like to keep without using excessive memory by storing it all on a permanent media. Thus, it would have been obvious to use a volatile/non-volatile memory combination to allow for maximum user customization while using minimum storage capacity.

31. Regarding claim 9, the combination of Schein and Lee teaches all limitations of the claim as discussed for the apparatus of claim 8 above.

32. Regarding claim 19, the combination of Schein and Lee teaches all limitations of the claim as discussed for the apparatus of claim 8 above, wherein Schein teaches the apparatus of claim 15.

33. Regarding claim 20, the combination of Schein and Lee teaches all limitations of the claim as discussed for the apparatus of claim 19 above.

34. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Maa (US 5,818,935).

35. Regarding claim 10, Schein discloses the apparatus of claim 3 but does not disclose an OSD font ROM for permanently storing fixed data, nor the presence of both a "user" and a "non-user" mode.



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36. In analogous art, Maa teaches the presence of an OSD font ROM (default font library; column 7, lines 5-6) which permanently stores default OSD data. The system can supply to the processor (processing unit 24 of Figure 1) either a special format for the OSD data such as a special font/language (column 5, lines 38-47) in a user mode or the generic data from the default library (in generic ASCII format with no additional information; column 6, lines 1-3). Maa offers this user/non-user mode when referring to the format of a "pointer", which is OSD data, such as a web address relating to the programming that is superimposed across the screen (column 5, lines 9-10).

37. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the television system of Schein to allow the user to select from generic data or special format data to process in order to create a composite video display. The motivation for doing so would have been to increase user interactivity and customization, thereby increasing appeal to consumers. Therefore, it would have been obvious to detect data in the signal or download it from a remote server and allow the user to choose between that data and a default library as taught by Maa when generating an OSD display in the system as taught by Schein.

38. Regarding claim 21, Schein and Maa teach all limitations of the claim, wherein Schein teaches the apparatus of claim 15 and the combination of the two teaches a fixed OSD font ROM as well as user and non-user modes as discussed for claim 10 above.

39. Regarding claim 42, Schein and Maa teach all limitations of the claim, wherein Schein discloses the apparatus of claim 39 as well as a buffer which stores OSD data (stores data about which shows match user search for use in instantly customized menu; column 11, lines 20-22). Maa teaches an OSD font ROM (default font library; column 7, lines 5-6) which permanently stores default OSD data. The system can supply to the processor (processing unit 24 of Figure 1) either a special format for the OSD data such as a special font/language from the font ROM (column 5, lines 38-47) in one mode or data from a second memory (generic storage unit; column 4, lines 50-52) in a second mode (e.g., information from a generic font library). Maa also teaches that the video signal passes through a display processor "in which text may be added or substituted for the video signal." This shows an inherent ability of the system to know when to add or substitute text (determining whether the device

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is in OSD display mode) and knowing which text to display (determining whether the device is in a first mode or a second mode). It would have been obvious to one of ordinary skill in the art to use a buffer, already present in the system of Schein, to temporarily store alternate OSD data and give the user a choice between the data in the font ROM and the temporary data in the buffer for even more customizability.

40. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Lee and further in view of Maa.

41. Regarding claim 11, the combination of Schein and Lee teaches the apparatus of claim 8 as described above. The combination fails to disclose, however, an OSD font ROM and the ability of the system to operate in a user or non-user mode.

42. In analogous art, Maa teaches the presence of an OSD font ROM (default font library; column 7, lines 5-6) which permanently stores default OSD data. The system can supply to the processor (processing unit 24 of Figure 1) either a special format for the OSD data such as a special font/language (column 5, lines 38-47) in a user mode or the generic data from the default library (in generic ASCII format with no additional information; column 6, lines 1-3). Maa offers this user/non-user mode when referring to the format of a "pointer", which is OSD data, such as a web address relating to the programming that is superimposed across the screen (column 5, lines 9-10).

43. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the television system of Schein and Lee to allow the user to select from generic data or special format data to process in order to create a composite video display. The motivation for doing so would have been to increase user interactivity and customization, thereby increasing appeal to consumers. Therefore, it would have been obvious to detect data in the signal or download it from a remote server and allow the user to choose between that data and a default library as taught by Maa when generating an OSD display in the system as taught by Schein.

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44. Regarding claim 22, the combination of Schein, Lee, and Maa teaches all limitations of the claim as discussed in reference to claim 11 above, wherein Schein and Lee teach the apparatus of claim 19.

45. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Lee and further in view of Kohn.

46. Regarding claim 12, the combination of Schein and Lee teaches the apparatus of claim 8 as described above. Schein discloses a memory which stores the incoming OSD data (column 9, lines 8-9). The combination fails to disclose, however, wherein the data is received in an RGB pattern and stored in an RGB pattern.

47. In analogous art, Kohn discloses broadcast receiving hardware that receives input signals in RGB (column 7, line 44) or YCC (chrominance/luminance; column 7, line 36). The digital broadcast signal (column 5, lines 1-5) then goes through a digital-to-analog converter (DAC 302 of Figure 3) and generates an analog RGB output.

48. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to convert and store the incoming OSD signal in an RGB pattern for use in the system of Schein and Lee. The motivation for doing so would have been to store the data in the form which it would most likely be used, as RGB pattern data is needed to drive CRT video displays, the benefit being for faster retrieval. If the conversion is done in advance, before retrieval is necessary, OSD data can be presented to the user faster and in a seamless manner. Therefore, it would have been obvious to store the incoming RGB data in RGB form in order to achieve faster processing.

49. Regarding claim 13, the combination of Schein, Lee, and Kohn disclose all limitations of the claim as stated for claim 12 above. Kohn discloses that the incoming broadcast signal is digital data; therefore it would inherently be in binary or hexadecimal format.

50. Claims 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Pavley (US 6,317,141).

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51. Regarding claim 23, Schein discloses an OSD data receiver which outputs a composite video signal, a modem connected to a communications network (on-line providers) which downloads the OSD data from an external source (column 13, lines 60-65), a video processor (processor 100 of Figure 3) which outputs a display video signal including the OSD data (Figure 16A). Schein does not disclose, however, that the receiver comprises a camera.

52. Pavley teaches a video camera (DVC; column 1, lines 56-61) which delivers the output frame in a YCC (chrominance/luminance) format (column 6, lines 29-32).

53. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to apply the video camera as taught by Washino to the receiver system as taught by Schein. The suggestion for doing so would have been to update the OSD data on the camera to include more timely or personalized information to be displayed on the screen prior to recording. Therefore, it would have been obvious to extend the OSD receiver system of Schein to include in the receiver a video camera.

54. Regarding claim 24, the combination of Schein and Pavley teaches the apparatus of claim 23, wherein Schein discloses a memory which stores the OSD data downloaded by the modem (receiver has internal memory, so it is inherent that when the data is downloaded it is stored in that memory at least temporarily before the data is processed and displayed; column 9, lines 6-9), and a controller which stores the data in response to a data storage signal (such as pressing of "Services button"; column 14, lines 39-46) and reading the data from memory in response to a display signal (displayed based on state of user input interface; column 9, lines 11-14).

55. Regarding claim 25, the combination of Schein and Pavley teaches the apparatus of claim 23, wherein Schein discloses the external OSD data source is an OSD graphic data providing server (connects to server databases through on-line providers; column 13, lines 60-64).

56. Regarding claim 26, the combination of Schein and Pavley teaches the apparatus of claim 24, wherein Schein discloses the external OSD source is a graphic data providing server (provider database; column 13, lines 60-64), and the controller downloads the via the modem from a home page of the OSD server (page which allows user to download more information, change subscriptions, and offer feedback; column 14, lines 54-61).

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57. Regarding claim 31, the combination of Schein and Pavley teaches the apparatus of claim 24, wherein Pavley discloses a deck which records the display video signal on a recording medium (user initiated video capture to record digital video; column 5, lines 47-50).

58. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Pavley and further in view of Lee.

59. Regarding claim 27, the combination of Schein and Pavley teaches the apparatus of claim 24, but fails to disclose wherein the memory comprises a buffer region and an OSD region, and wherein the controller stores the data initially in the buffer region, then transfers it to the OSD region, then processes it for display.

60. In analogous art, Lee teaches an OSD system with multiple memories. The apparatus comprises a volatile buffer memory and a non-volatile RAM memory (column 3, lines 21-24). The buffer contents are temporary and held only while the OSD (in this case a memo) is being edited, while the RAM stores the memo until a given time whether or not the system is on. The OSD data is stored in the buffer then transmitted to the OSD region (RAM) in response to a replacement signal (column 4, lines 50-54) and supplied to the processor for display in response to a display signal (after transfer the computer "calls the program for indicating storage completion of the memos. This causes display..."; column 4, lines 54-58).

61. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use a two memory system as shown by Lee to store and display data in the apparatus as taught by Schein and Pavley. The motivation for doing so would have been to allow the incoming OSD data to be temporarily stored upon transmission until the user could decide whether to permanently keep it or discard it. This would allow the user to select what data they would like to keep without using excessive memory by storing it all on a permanent media. Thus, it would have been obvious to use a volatile/non-volatile memory combination to allow for maximum user customization while using minimum storage capacity in a receiver comprising a video camera.

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62. Regarding claim 28, the combination of Schein, Pavley and Lee teaches all limitations of the claim as discussed for the apparatus of claim 27 above.

63. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Pavley and further in view of Maa.

64. Regarding claim 29, the combination of Schein and Pavley teaches the apparatus of claim 24 as described above. The combination fails to disclose, however, an OSD font ROM and the ability of the system to operate in a user or non-user mode.

65. In analogous art, Maa teaches the presence of an OSD font ROM (default font library; column 7, lines 5-6) which permanently stores default OSD data. The system can supply to the processor (processing unit 24 of Figure 1) either a special format for the OSD data such as a special font/language (column 5, lines 38-47) in a user mode or the generic data from the default library (in generic ASCII format with no additional information; column 6, lines 1-3). Maa offers this user/non-user mode when referring to the format of a "pointer", which is OSD data, such as a web address relating to the programming that is superimposed across the screen (column 5, lines 9-10).

66. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the television system of Schein and Pavley to allow the user to select from generic data or special format data to process in order to create a composite video display. The motivation for doing so would have been to increase user interactivity and customization, thereby increasing appeal to consumers. Therefore, it would have been obvious to detect data in the signal or download it from a remote server and allow the user to choose between that data and a default library as taught by Maa when generating an OSD display in the system as taught by Schein and Pavley.

67. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Pavley and Lee and further in view of Maa.

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68. Regarding claim 30, the combination of Schein, Pavley, and Lee teaches the apparatus of claim 27 as described above. The combination fails to disclose, however, an OSD font ROM and the ability of the system to operate in a user or non-user mode.

69. In analogous art, Maa teaches the presence of an OSD font ROM (default font library; column 7, lines 5-6) which permanently stores default OSD data. The system can supply to the processor (processing unit 24 of Figure 1) either a special format for the OSD data such as a special font/language (column 5, lines 38-47) in a user mode or the generic data from the default library (in generic ASCII format with no additional information; column 6, lines 1-3). Maa offers this user / non-user mode when referring to the format of a "pointer", which is OSD data, such as a web address relating to the programming that is superimposed across the screen (column 5, lines 9-10).

70. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the television system of Schein, Pavley and Lee to allow the user to select from generic data or special format data to process in order to create a composite video display. The motivation for doing so would have been to increase user interactivity and customization, thereby increasing appeal to consumers. Therefore, it would have been obvious to detect data in the signal or download it from a remote server and allow the user to choose between that data and a default library as taught by Maa when generating an OSD display in the system as taught by Schein, Pavley and Lee.

71. Claims 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Pavley and further in view of Robinson (IEEE Publication, "A High-Quality Switched FM Video System").

72. The combination of Schein and Pavley teaches the apparatus of claim 23 as noted above. Schein also discloses a memory which stores the OSD data downloaded by the modem (receiver has internal memory, so it is inherent that when the data is downloaded it is stored in that memory at least temporarily before the data is processed and displayed; column 9, lines 6-9), and a controller which stores the data in response to a data storage signal (such as pressing of "Services button"; column 14, lines 39-46) and reading the data from memory in response to a display signal (displayed based on state of user input interface; column 9, lines 11-14), as well as a VCR deck for recording video display signals

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(VCRs 64 and 36 of Figure 1; column 5, lines 20-23). In addition, Schein discloses that the OSD signal is presented to the processor in RGB format (column 9, lines 10-11), and teaches the ability of the receiver to overlap the video signal and the OSD signal as seen in Figures 17B and 17C. Pavley discloses that the video signal processed by the camera is done so in YCC (luminance and chrominance) format (converted by the DSP into CCIR streaming video which uses luminance and chrominance data; column 5, lines 23-35). The combination fails to disclose, however, FM-modulating the overlapped signal.

73. Robinson teaches FM-modulating video signals for transmission. See section entitled "System K" on page 54 of Robinson.

74. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modulate the composite video signal developed by the combination of Schein and Pavley using FM modulation. The suggestion for doing so would have been to minimize component costs, as "the use of FM allows the use of inexpensive optoelectronic devices in the link." See page 54, fourth paragraph under section heading "System K". This would allow for a high-quality, inexpensive link between the camera of Pavley, and the display device and recording deck of Schein. Therefore, it would have been obvious to minimize costs by FM-modulating the signal, a combination of the RGB on-screen display signal and the YCC video signal.

75. Claims 35 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Needham (US 6,628,831)

76. Regarding claim 35, Schein discloses a video processor for processing the video signal and overlapping the video signal with an OSD for display (Figure 17B shows video signal and OSD on same display screen; column 9, lines 15-19), a modem (modem 72 of Figure 2) connected to a communications network (on-line providers) which downloads the OSD data from an external source (column 13, lines 60-65), a memory storing data downloaded via the modem (receiver has internal memory, so it is inherent that when the data is downloaded it is stored in that memory at least temporarily before the data is processed and displayed; column 9, lines 6-9), a deck recording the display video signal (VCRs 64 and 36 of Figure 1; column 5, lines 20-23), a controller storing the OSD



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data in response to an downloading signal (user input, e.g. "Services Button"; column 14, lines 39-46) and reading the data from memory in response to a display signal (displayed based on state of user input interface; column 9, lines 11-14). Note: Schein discloses that the invention may be implemented on a PC, PCTV, television, or television connected to a set-top box. The "television system" refers to the requisite hardware and encompasses all of these physical embodiments. Schein does not disclose, however, that the receiver comprises a web camera.

77. Needham discloses a web camera system, consisting of a video camera, PC, and web server (Figure 1; column 1, lines 22-25). This system outputs a video signal to a PC, and allows the user to add OSD features such as time stamping and text additions to the captured image (column 1, lines 49-54) for when it is uploaded to the network (26-28).

78. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the system taught by Schein and Pavley to encompass a web camera as the video source. The motivation for doing so would have been to allow the user to update available OSD information to include in their image to be broadcast across a network via a common web camera. This would allow the user to include timely and personalized information along with their images, making the product more appealing to the public. Therefore, it would have been obvious to incorporate the web camera of Needham into the system of Schein and Pavley to create a web cam system with updatable graphic overlays.

79. Regarding claim 45, the combination of Schein and Needham disclose all limitations of the claim, wherein Schein teaches the apparatus of claim 41 as well as overlapping the OSD data with an image signal and displaying that overlapped signal (Figure 17B) and Needham teaches receiving an object through a lens (in this case, a web camera).

80. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Naim (US 6,694,200).

81. Regarding claim 36, Schein discloses an apparatus comprising an OSD graphic data receiver (part of the "television system" as described in column 8, lines 13-21) which receives OSD graphic data

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from an external source. Schein also discloses a processor which processes the OSD graphic data (processor 100 of Figure 3; column 9, lines 3-5). He also discloses wherein the receiver further comprises a memory which stores the incoming OSD data (column 9, lines 8-9) and a controller (OSD controller; column 8, lines 58-60) which stores the data in memory in response to a storage signal (graphic commands; column 8, lines 8-9) and reads the data in response to a display signal (displayed based on state of user input interface; column 9, lines 11-14). Schein does not disclose, however, that the receiver is an MP3 player.

82. Naim teaches an MP3 player (portable device, plays digital media files; column 2, lines 40-52) that downloads data and program files from an external source (personal computer; column 8, lines 29-33). The programs downloaded from the PC are executed to provide visual feedback and prompts on the display, making the files OSD data (column 11, lines 42-44).

83. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to apply the OSD retrieval system as taught by Schein to a portable audio device, such as an MP3 player. The motivation for doing so would have been to allow the user to obtain select files and their accompanying information from a larger personal media library and create a personal playlist on the portable personal media device. Therefore, it would have been obvious to apply the OSD retrieval system of Schein to a portable MP3 player, with the response of the display of the player being based on the information and data received from the personal computer.

84. Regarding claim 37, the combination of Schein and Naim teaches the apparatus of claim 36 as noted above, wherein the external source of data is a personal computer (column 8, lines 29-33).

#### ***Contact Information***

85. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. Banker et al. (US 5,579,057) discloses a networked receiver which allows the user to update a font library via modem or broadcast signal.
- b. Ryu (US 6,226,047) discloses an OSD receiver and generator.

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- c. Land (US2002/0112180) discloses a web cam with OSD features.
- d. Inoue et al. (US 6,580,462) discloses a receiver with a dual memory system, a volatile buffer region and a non-volatile OSD region.
- e. Chang (US 5,181,113) discloses a receiver and OSD display system.
- f. Naito et al. (US 5,623,316) discloses an on screen display apparatus with a font ROM.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley Stiles whose telephone number is (703) 308-6107. The examiner can normally be reached on 7:00-4:30, out of the office on alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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